Fuzzy Particle Swarm Optimization for Manufacturing Systems

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Abstract: Particle Swarm Optimization (PSO) is proposed in our research to generate Fuzzy Controller, a fuzzy logic control (FLC) is proposed to control manufacturing system presented by m-machine line as an m-order state-space. As results indicated, use particle swarm optimization (PSO) method for optimizing a fuzzy logic controller (FLC) for manufacturing system is better than that of fuzzy logic control (FLC) not optimized and applying fuzzy keeping the production demand.

Keywords : Particle Swarm Optimization, PSO, fuzzy logic control, FLC, manufacturing system